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10/084,174	02/28/2002	Frances Jiang	29250-000571/US	4800

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EXAMINER

JOO, JOSHUA

ART UNIT	PAPER NUMBER
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2154

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06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/084,174	Applicant(s) JIANG ET AL.	
	Examiner Joshua Joo	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 11-17, 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Response to Remarks filed 05/07/2007

1. Claims 1-10, 11-17, and 19-22 are presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 7, 12, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Immonen et al, US Publication #2002/0132611 (Immonen hereinafter), in view of Tuunanen, US Patent #6,487,288 (Tuunanen hereinafter) and Rasanen, US Publication #2005/0286418 (Rasanen hereinafter)

5. As per claims 1 and 19, Immonen teaches substantially the invention as claimed including a method for configuring negotiation in a data communication system, Immonen's teachings comprising:

receiving, at an access network, an access request and a token from an access terminal, the token associating with a parameter group type (Paragraph 0048. Receive connection request. Paragraphs 0047; 0052-0053; 0080-0081. Request indicates a QoS profile (token).);

sending information to and receiving information from the access terminal according to the default parameter group without negotiating parameters for the associated parameter group type when a portion of the access network communicating with the access terminal operates according to the default

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parameter group for the associated parameter group type and the request indicates the access terminal operates according to the default parameter group for the associated parameter group type (Paragraph 0053. If connection request does not indicate a specific QoS attributes, default profile is used for the requested connection.).

6. Immonen teaches of determining if a specific QoS profile is requested, and if not, using a default profile for the requested connection. Immonen does not expressly teach of the token indicating whether the access terminal is operating according to a default parameter group for the associated parameter group type. Immonen also does not specifically teach of using a token including a plurality of bits, each bit associated with a different parameter group type for indicating whether the access terminal is operating according to a default parameter group.

Tuunanen teaches of sending a message with an identifier (token) that identifies a default set of parameters (col. 5, lines 50-60).

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Immonen with the teachings of Tuunanen for the connection request to contain an identifier that identifies a default set of parameters. The motivation for the suggested modification is that since a default profile is used when a QoS is not specified in the connection request, Tuunanen's teachings would provide an explicitly identifier that indicates that default parameters are to be used in the connection, or identify a set of default parameters from default sets (col. 5, lines 55-57).

8. Immonen and Tuunanen still do not specifically teach of using the token including a plurality of bits, each bit associated with a different parameter group type for indicating whether the access terminal is operating according to a default parameter group

Rasanen teaches a similar system comprising of transmitting a message comprising an element that indicates services and protocol, wherein a bit (0 or 1) is used for indication of a parameter (Paragraph 0053).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the suggested system of Immonen and Tuunanen with the teachings of Rasanen to use a bit for indication of a parameter (parameter group type), and use the bit to indicate the default parameters. The motivation for the suggested modification is that Rasanen's teachings would enhance the system of Immonen and Tuunanen by providing an indicator of parameters, and transmitting a small unit of data to indicate the access terminal's parameters. Since Immonen teaches that the quality of service control comprises a plurality of service attributes (Paragraph 0046) and Tuunanen teaches of a set of default parameters, it would have been also obvious to one of ordinary skill in the art that the connection request may comprise a plurality of bits to indicate whether the access terminal operates according to default parameters for the plurality of service attributes.

10. As per claim 12, Immonen teaches substantially the invention as claimed including a method for configuration negotiation in a data communication system, Immonen's teachings comprising:

receiving, at an access network, an access request and a token from an access terminal, indicating whether the access terminal is operating according to a default parameter group for the associated parameter group type (Paragraph 0048. Receive connection request. Paragraph 0047; 0052-0053; 0080-0081. Request indicates if a specific QoS profile and attributes are requested, and type of class.);

first accessing memory at the access network when the bit indicates the access terminal is not operating according to the default parameter group type to obtain a stored parameter group of the associated parameter group type for the access terminal (Paragraph 0047. Subscriber specific profile is stored for each subscriber. Paragraph 0057-0058. Use specific QoS profile requested by the user.); and

sending information to and receiving information from the access terminal according to the accessed parameter group of the associated parameter group type for the access terminal without negotiating a parameter group of the associated parameter group type when a portion of the access network communicating with the access terminal operates according the accessed parameter group for the associated parameter group type (Paragraph 0057-0058. Use specific QoS profile for connection.), wherein the token includes different parameter group types (Paragraph 0057; Claim 2. Request indicates values of attributes.).

11. Immonen teaches of determining if a specific QoS profile is requested, and if not, a default profile is used for the requested connection. Immonen does not specifically teach that the token indicates whether the access terminal is operating according to a default parameter group for the associated parameter group type. Immonen also does not specifically teach of using a token including a plurality of bits, each bit associated with a different parameter group type for indicating whether the access terminal is operating according to a default parameter group.

Tuunanen teaches of sending a message with an identifier (token) that identifies a default set of parameters (col. 5, lines 50-60).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Immonen with the teachings of Tuunanen for the connection request to contain an identifier that identifies a default set of parameters. The motivation for the suggested modification is that since a default profile is used when a QoS is not specified in the connection request, Tuunanen's teachings would provide an explicitly identifier that indicates that default parameters are to be used in the connection, or identify a set of default parameters from default sets (col. 5, lines 55-57).

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13. Immonen and Tuunanen still do not specifically teach of using the token including a plurality of bits, each bit associated with a different parameter group type for indicating whether the access terminal is operating according to a default parameter group

Rasanen teaches a similar system comprising of transmitting a message comprising an element that indicates services and protocol, wherein a bit (0 or 1) is used for indication of a parameter (Paragraph 0053).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the suggested system of Immonen and Tuunanen with the teachings of Rasanen to use a bit for indication of a parameter (parameter group type). The motivation for the suggested modification is that Rasanen's teachings would enhance the system of Immonen and Tuunanen by providing an indicator of parameters, and transmitting a small unit of data to indicate the access terminal's parameters. Since Immonen teaches that the quality of service control comprises a plurality of service attributes (Paragraph 0046) and Tuunanen teaches of a set of default parameters, it would have been also obvious to one of ordinary skill in the art that the connection request may comprise a plurality of bits to indicate whether the access terminal operates according to default parameters for the plurality of service attributes.

15. As per claim 2, Immonen teaches the method of claim 1, wherein a parameter group type is a type of protocol, and a parameter group in the parameter group type is a specific protocol in the parameter group type (Paragraphs 0057; 0064. Request indicates class, wherein classes comprise VoIP, video streaming. Claim 2; Paragraphs 0046-0047; 0058. Class is associated with attributes comprising SDU size, BER, bitrate.).

16. As per claim 4, Immonen, Tuunanen, and Rasanen taught the method of claim 1. Immonen further teaches the method of claim 1, further comprising:

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first accessing memory at the access network when the bit indicates the access terminal is not operating according to the default parameter group to obtain a stored parameter group of the associated parameter group type for the access terminal (Paragraphs 0048; 0056-0057. Obtain subscriber specific service profile.); and

sending information to and receiving information from the access terminal according to the accessed parameter group of the associated parameter group type for the access terminal without negotiating a parameter group of the associated parameter group type when a portion of the access network communicating with the access terminal operates according the accessed parameter group for the associated parameter group type (Paragraphs 0057-0058. Subscribed attributes are used to activate connection.).

17. As per claims 7 and 15, Immonen, Tuunanen, and Rasanen taught of the bit indicating the access terminal is not operating according to a default parameter group. Immonen further teaches the method of claim 4, further comprising: second accessing memory at another access network to obtain a stored parameter group of the associated parameter group type for the access terminal when the first accessing step fails to access a stored parameter group of the associated parameter group type for the access terminal and the bit indicates the access terminal is not operating according to a default parameter group (Paragraph 0048. Access subscriber specific profile from the HLR if not at the SGNS).

18. Claims 3, 5-6, 8-10, 13, 14, 16, 17, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Immonen, Tuunanen, and Rasanen, in view of Bender et al, US Patent #6,539,030 (Bender hereinafter).

19. As per claims 3 and 13, Immonen teaches the method of claim 1, further comprising: sending information to and receiving information from the access terminal after determining a parameter group for

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the associated parameter group type (Paragraphs 0057-0058. Activate connection.) when (i) the portion of the access network communicating with the access terminal operates according to a parameter group other than the default parameter group for the associated parameter group type and the bit indicates the access terminal operates according to the default parameter group for the associated parameter group type, or (ii) the portion of the access network communicating with the access terminal operates according to the default parameter group for the associated parameter group type and the bit indicates the access terminal operates according to a parameter group other than the default parameter group for the parameter group type (Paragraphs 0056-0058. User equipment's request indicates specific values.). Immonen further teaches of an access terminal requesting a stored profile and specific parameters (Paragraph 0053; 0057); and the access network determining parameters when the access terminal operates other than the default parameters (Paragraph 0058). However, Immonen does not specifically teach of negotiating a parameter group.

Bender teaches a similar system comprising negotiating parameters between an access terminal and an access network (col. 11, lines 40-49; col. 14, lines 29-36, 48-64).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters between the access terminal and the access network. The motivation for the suggested combination is that Bender's teachings would allow the access terminal (user equipment) to set and accept values for protocols for communication (col. 15, lines 1-8).

21. As per claim 5, the Immonen teaches the method comprising sending information to and receiving information from the access terminal after the access network determines a parameter group of the associated parameter group type when the portion of the access network does not operate according to the stored parameter group (Paragraph 0053; 0057-0058). However, Immonen does not specifically teach

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of negotiating a parameter group of the associated parameter group type when the portion of the access network communicating with the access terminal operates according to a parameter group of the associated parameter group type which is different from the stored parameter group of the associated parameter group type for the access terminal.

Bender teaches a similar system comprising negotiating parameters between an access terminal and an access network (col. 11, lines 40-49; col. 14, lines 29-36, 48-64).

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters between the access terminal and the access network, and it would have been obvious to one of ordinary skill to negotiate parameters when the network operates in different parameters than the access terminal. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to connect to the network with acceptable parameters, and allow the access terminal (user equipment) to set and accept values for each protocol sent by the access network for communication (col. 15, lines 1-8).

23. As per claims 6 and 14, Immonen teaches of accessing stored parameter group, i.e. service attributes. However, Immonen does not specifically teach the method of claim 4, further comprising: sending information to and receiving information from with the access terminal after negotiating a parameter group of the associated parameter group type when the first accessing step fails to access a stored parameter group of the associated parameter group type for the access terminal.

Bender teaches a similar system comprising negotiating parameters between an access terminal and an access network (col. 11, lines 40-49; col. 14, lines 29-36, 48-64).

24. Even though Immonen does not specifically teach of failing to access a stored parameter group, it would have been obvious to one of ordinary skill in the art that the access terminal would not be able to

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obtain a stored parameter group, i.e. fail to access a stored parameter, if the access terminal does not have a initially stored parameter group. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters between the access terminal and the access network, and negotiate parameters when access network fails to access stored parameters. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to connect to the network with acceptable parameters, and allow the access terminal (user equipment) to set and accept values for each protocol sent by the access network for communication (col. 15, lines 1-8).

25. As per claim 8 and 16, Immonen teaches of accessing a SGSN and HLR for the subscriber specific service profile. However, Immonen does not specifically teach the method of claim 7, further comprising: sending information to and receiving information from the access terminal after negotiating a parameter group of the associated parameter group type when the first and second accessing steps fail to access a stored parameter group of the associated parameter group type for the access terminal.

Bender teaches a similar system comprising negotiating parameters between an access terminal and an access network (col. 11, lines 40-49; col. 14, lines 29-36, 48-64).

26. Even though Immonen does not explicitly teach of failing to access a stored parameter group, it would have been obvious to one of ordinary skill in the art that the access terminal would not be able to obtain a stored parameter group if the access terminal does not initially have a stored parameter group. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters between the access terminal and the access network. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to connect to the network with acceptable parameters, and

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allow the access terminal (user equipment) to set and accept values for each protocol sent by the access network for communication (col. 15, lines 1-8).

27. As per claims 9, 10 and 17, Immonen does not specifically teach the method, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete.

Bender teaches a similar system comprising negotiating parameters between an access terminal and an access network, wherein current parameter group of each parameter group type is sent to the access terminal (col. 11, lines 40-49; col. 14, lines 29-64; col. 14, line 65—col. 15, line 8; col. 15, lines 41-49).

28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters between an access terminal and an access network, wherein current parameter group of each parameter group type is sent to the access terminal. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to set and accept values for each protocol sent by the access network for communication, and activate negotiated session layers and protocols (col. 15, lines 1-8, 66-col. 16, lines 2).

29. As per claim 20, Immonen does not specifically teach the method of claim 8, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete.

Bender teaches of negotiating parameters, sending a response indicating acceptable subtype of a type, and determining configuration protocols after negotiation is completed (col. 14, lines 47-61; col. 15, lines 41-52).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters, send a response indicating acceptable subtype of a type, and determine configuration protocols after negotiation is completed. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to set values on negotiated parameters, and activate negotiated session layers and protocols (col. 15, lines 1-8, 66-col. 16, lines 2).

31. As per claim 21, Immonen does not specifically teach the method of claim 14, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete.

Bender teaches of negotiating parameters, sending a response indicating acceptable subtype of a type, and determining configuration protocols after negotiation is completed (col. 14, lines 47-61; col. 15, lines 41-52).

32. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters, send a response indicating acceptable subtype of a type, and determine configuration protocols after negotiation is completed. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to set values on negotiated parameters, and activate negotiated session layers and protocols (col. 15, lines 1-8, 66-col. 16, lines 2).

33. As per claim 22, Immonen does not specifically teach the method of claim 16, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete.

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Bender teaches of negotiating parameters, sending a response indicating acceptable subtype of a type, and determining configuration protocols after negotiation is completed (col. 14, lines 47-61; col. 15, lines 41-52).

34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Immonen, Tuunanen, Rasanen, and Bender to negotiate parameters, send a response indicating acceptable subtype of a type, and determine configuration protocols after negotiation is completed. The motivation for the suggested combination is that Bender's teachings would allow the access terminal to set values on negotiated parameters, and activate negotiated session layers and protocols (col. 15, lines 1-8, 66-col. 16, lines 2).

Conclusion

35. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see <http://pair->

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Business Center (EBC) at 866-217-9197 (toll-free).

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 21 00

May 21, 2007

JJ